

CHILD SPACING — “THE NATURAL WAY”



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CHILD SPACING - NATURE LENDS A HAND

A NON INVASIVE METHOD OF FERTILITY REGULATION - THE BILLINGS OVULATION METHOD

DISCOVER A SIMPLE AND RELIABLE METHOD OF FERTILITY REGULATION

YOU WILL HAVE A LIFETIME TO BE THANKFUL.

Dr. Agostina Putti Thomas

assisted by

Joyce Jayaseelan and Carmela Dhanaraj

Department of Family Welfare and Fertility Study

St. John's Medical College and Hospital

Bangalore.

This book is written from the need to offer to various groups the opportunity to get acquainted with the simple, scientific, reliable, inexpensive and non-invasive method to space child birth - **"The Natural Way"**.

Particular efforts are made to use simple words to explain the relatively difficult scientific concepts in order to make understanding easy to people of various cultures and different educational backgrounds. From our experience of working in the past several years, with people from rural areas and urban slums and also teaching the medical and nursing students at St. John's Medical College and other colleges in various parts of the country, we felt this particular way of presenting this harmless, simple and inbuilt method of fertility regulation, would benefit our people.

This book will be useful not only for those who wish to learn and teach Fertility Awareness but also to those who teach sexuality in schools and colleges.

We thank Dr. John and Lyn Billings of Australia who have been a source of inspiration, encouragement and support to us in our work and have a soft corner in their hearts for St. John's. Having described this method after

intensive research, they have been teaching it with inexhaustible energy and single mindedness through out the World. It is mainly due to their efforts and that of their collaborators, about fifty million couples in over 100 countries follow this method with satisfaction.

We thank Dr. Percival Fernandez, the Director of St. John's Medical College and Hospital, Fr. Patrick Rodrigues, Administrator, St. John's Medical College Hospital and Dr. Alfred Mascarenhas, Principal, St. John's Medical College for their steadfast support in the development and functioning of the Department of Family Welfare and Fertility Study and helping in disseminating the knowledge of Fertility Awareness throughout the country through this Department.

Dr. Agostina Putti Thomas

"The Billings Method will be recognised in medical history as one of the greatest discoveries of this Century".

- Thomas W. Hilgers
Professor of Obstetrics &
Gynaecology, Omaha USA

FOREWORD

The knowledge of patterns of fertility in the human being has played a significant role in fertility awareness, which responsible married couples make use of. The education of couples in this field must be thorough, proper and sustained.

The present book aims to present the field of human reproduction and fertility awareness in the context of the scientific advances of the last few decades and its applicability in developing countries. It is based on the experience of several research workers in the field and the high rate of success of the Ovulation Method of Natural Family Planning.

The author, Dr. Sr. Agostina Thomas, has had a wide experience in this field, both in rural and urban situations. At present she has successfully guided the programs of the Department of Family Welfare and Fertility Studies at St. John's Medical College and Hospital, having conducted several training programmes for participants from various backgrounds, on the national and international level.

I am sure that the reader will find here a lucid and thorough explanation of the various facets of details of the

Ovulation Method, explained in a clear language, easy to understand and teach others.

I wish this book all the success that it deserves.

Dr. A.F.A. Mascarenhas,
Principal,
St. John's Medical College,
Bangalore.

ACKNOWLEDGEMENT

We thank Dr. Fr. Percival Fernandes, Director, SJMC & H for designing the cover. Dr. R.Narayanan, Professor and Head, Department of Obstetrics and Gynaecology for the support he had always extended to our Department especially for being co-investigator in our research project. Along with Dr. Sr.Lillian, Proffessor, Ob. & Gynae. and Dr. Dara Amar, Prof.Community Health, he has coordinated our teaching programmes, on the local, national and international level.

We thank the staff in the Department, Joyce Jayaseelan, the senior NFP trainer, and Shirly Menezes, the Research Assistant, Carmela Dhanaraj and Kumari Baptist who through their experience in teaching have contributed material, dealing with practical aspects of the Method. Thanks to Mr. Peter Beswick, whose generous help made the pilot study “Ovulation detection in Postpartum breast feeding Women” and also the Rural NFP Trainers’ training programme possible.

We thank the many women who are NFP trainees and NFP users who documented their symptoms and visited the Department for tests and thus enriched our knowledge that made this book and our Research Project possible.

Also, thanks to Joyce Jayaseelan for the art work, Carmela Dhanaraj for proof reading, and Kumari Baptist for helping us in several little ways. Thanks to Seva Sadan Printers for printing the book attractively and in record time.

[The natural way is naturally the best.]

GENERAL CONSIDERATIONS

Among the current and pressing concerns of mankind, often so difficult and acute, are those concerning the regulation of birth and they have become some of the contemporary society's confounding problems. They have driven people to search and research for answers and alternatives that hopefully could solve the intricacies. One of the solutions and alternatives is the truly humanistic and holistic method, the Natural Family Planning (NFP).

Now-a-days people are increasingly having recourse to nature, as in natural childbirth, natural foods, nature cure etc. Similarly, the child-spacing can be done in a natural way by voluntarily controlling fertility, without drugs, devices or organ mutilation.

NFP is an important topic in the Fields of reproductive health and population. The need for non-hormonal, non-invasive methods is increasingly felt among the general public, both in the developing and developed world. It is generally accepted that new hormonal or surgical methods of contraception will not be available in the next decade and

that the need for non-harmonal, non-invasive methods is well documented. Data from recent Demographic and health services indicate significant use of periodic abstinence for the purpose of avoiding pregnancy in many countries throughout the world (Vide American Journal of Ob. & Gyn. Vol.165 No.6, December1991). Most have little knowledge of their fertility and thus use the method ineffectively. This book will be of use specially for couples who wish to use the natural method and require information.

Natural Family Planning (NFP) is a term used to describe methods of planning or postponing pregnancy based on observation of naturally occurring signs and symptoms of the fertile phases of the menstrual cycle. People who use NFP to avoid or delay pregnancy abstain from intercourse on potentially fertile days. Those wanting to achieve pregnancy use NFP to identify the fertile phase and hence maximize the probability of pregnancy. Techniques include the Basal Body Temperature method, the Ovulation (Billing's) method and the symptothermal method. It is important to note that NFP IS NOT A METHOD OF CONTRACEPTION BUT RATHER A TECHNIQUE FOR DETERMINING THE FERTILE PERIOD; abstinence during this period is what prevents pregnancy. The method is thus likely to be of interest for people who, for any reason, do not wish to use mechanical or pharmacological contraceptives (WHO) for moral reasons.

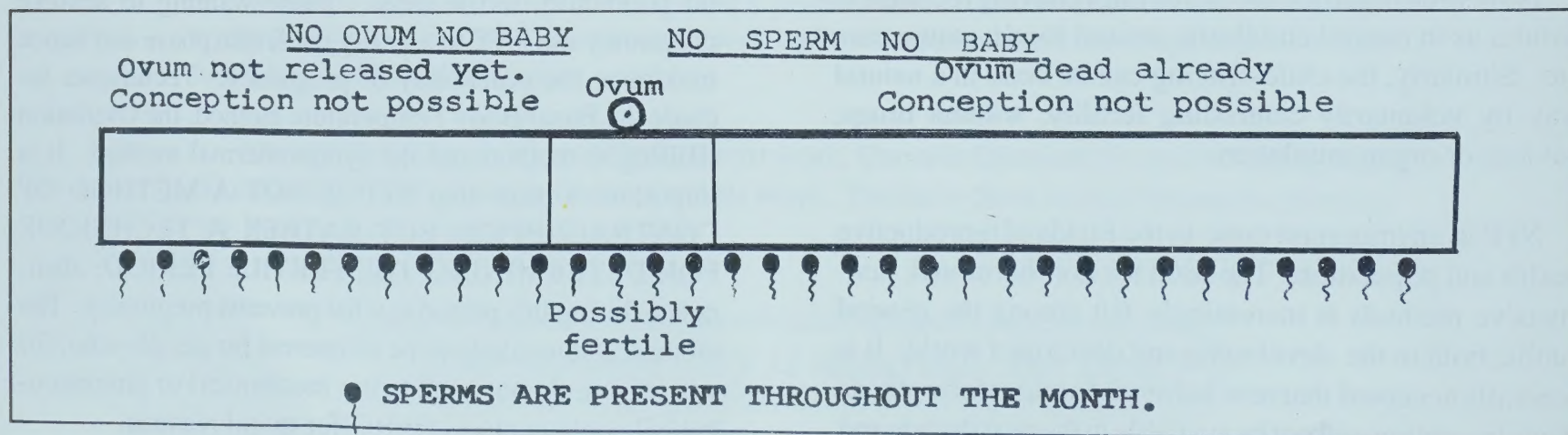
The Ovulation method is not same as the Rhythm Method, which was not very reliable. Improved understanding of human reproductive physiology has led to the development of more reliable natural methods of family planning. Instead of using only calendar records of past cycle lengths to calculate the probable fertile period, recently developed Ovulation method uses day to day monitoring of physiological symptoms of fertility.

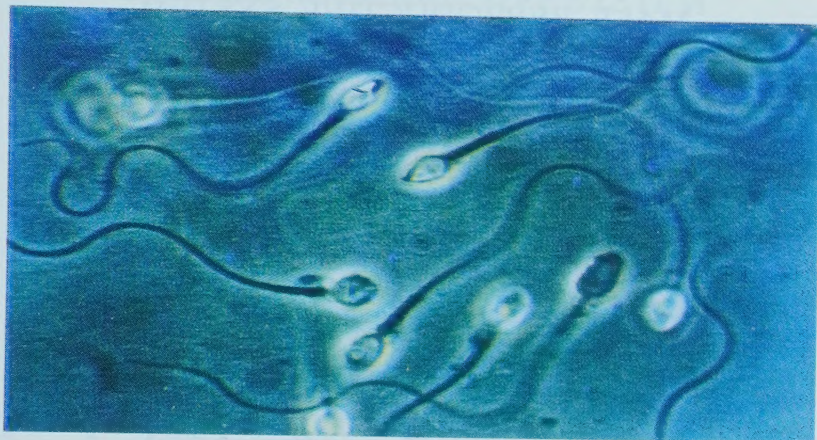
PRECISE DETECTION OF OVULATION IS THE BASIS OF THE SUCCESS OF OVULATION METHOD, WHICH IS ALSO KNOWN AS CERVICAL MUCUS METHOD

The Basic Principle of the Method:

There is an inbuilt family planning mechanism in the

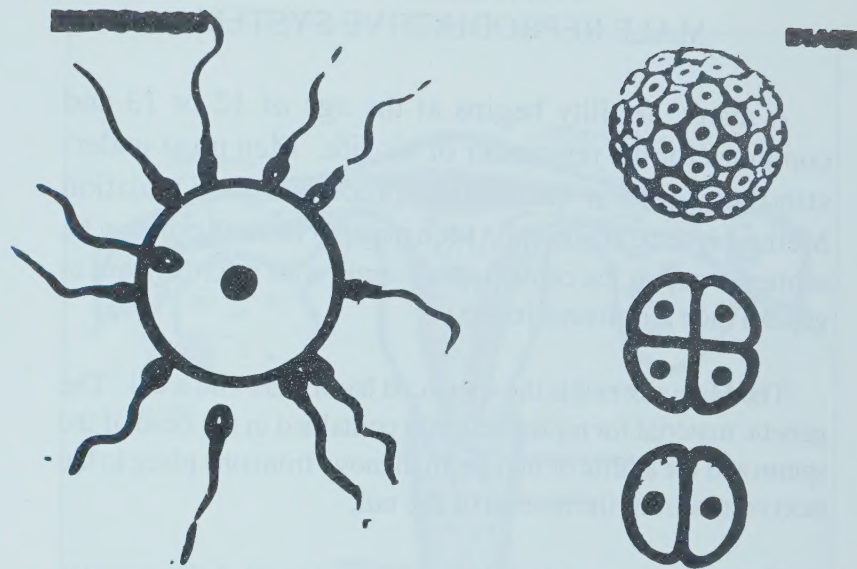
body of the woman. The natural method is based on the fact that the woman is infertile during most of the days of her menstrual cycle and is able to conceive only during a few days, that is around the time of Ovulation. Man produces sperms throughout the month whereas woman produces usually one egg during a single menstrual cycle and if not fertilised, it dies within 24 hours. For conception to occur at least one egg and one sperm are necessary. The egg is available for a limited duration and therefore, the available time for pregnancy to occur is limited too. If the couple could be taught how to recognise the time of ovulation, which is the time of possible fertility, that is the time when the woman could conceive, pregnancy could be avoided or postponed by abstaining from marital act during this period. This information we call, **"FERTILITY AWARENESS"**.





SPERMS

How does a woman recognise the fertile time (Ovulation) in her menstrual cycle? : The Ovulation can be identified through various tests like ultrasound, sonography, hormonal estimation, basal body temperature (thermal shift) etc. These tests are expensive, time consuming, and require complicated equipment. Instead, what is needed is a marker of fertility that women themselves can recognise, one that is simple, inexpensive and reliable. **THE MUCUS PRODUCED BY THE CERVICAL CRYPTS THAT GIVES A SENSATION OF WETNESS OR SLIPPERINESS IN THE VAGINA, WHICH CAN BE RECOGNISED CLEARLY BY WOMEN THEMSELVES IS THE BEST INDICATOR OF FERTILITY.** As a result of study done on hundreds of women, in Australia, in the West and in India, it became clear that observing and recording certain bodily changes that occur



FERTILIZATION

in a woman's menstrual cycle and using the information as a guide, a couple can learn to identify fertile and infertile phases in the menstrual cycle.

Fertility awareness helps couple to ACHIEVE as well as POSTPONE pregnancy by timing of the marital act. How do couples acquire fertility awareness?

To understand the Ovulation Method it would be useful but not essential if the couple have a basic knowledge of the reproductive system and how it functions.

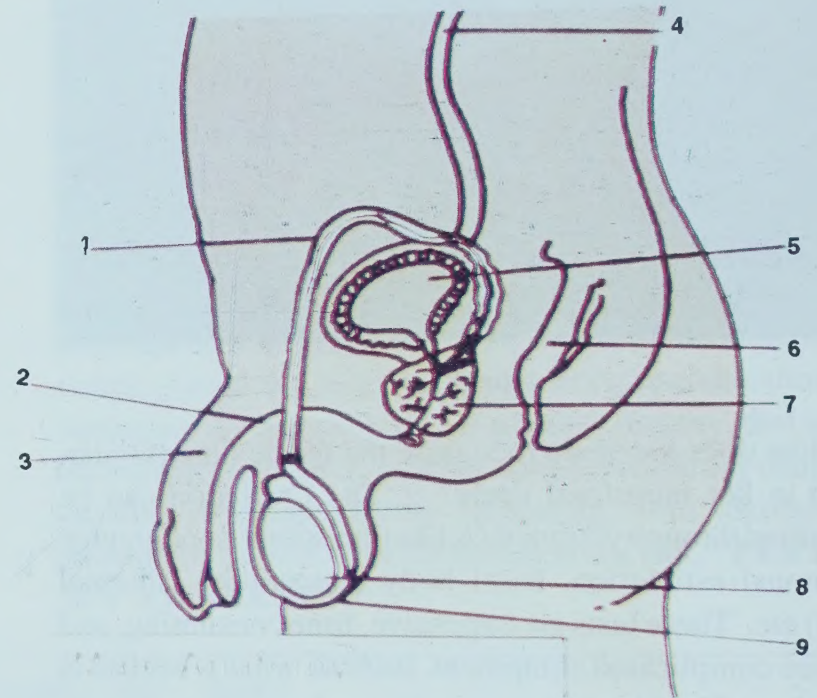
MALE REPRODUCTIVE SYSTEM

A man's fertility begins at the age of 12 or 13 and continues for the remainder of his life. Men must understand their role in the fertility process if the Ovulation Method is to be successful. Men may not be fertile or may be subfertile within the context of a couple with infertility but in general men are always fertile.

The Male sex cell is the sperm. It has a head and a tail. The genetic material for reproduction is contained in the head of the sperm and the ability of the sperm to move from one place to the next comes from the motion of the tail.

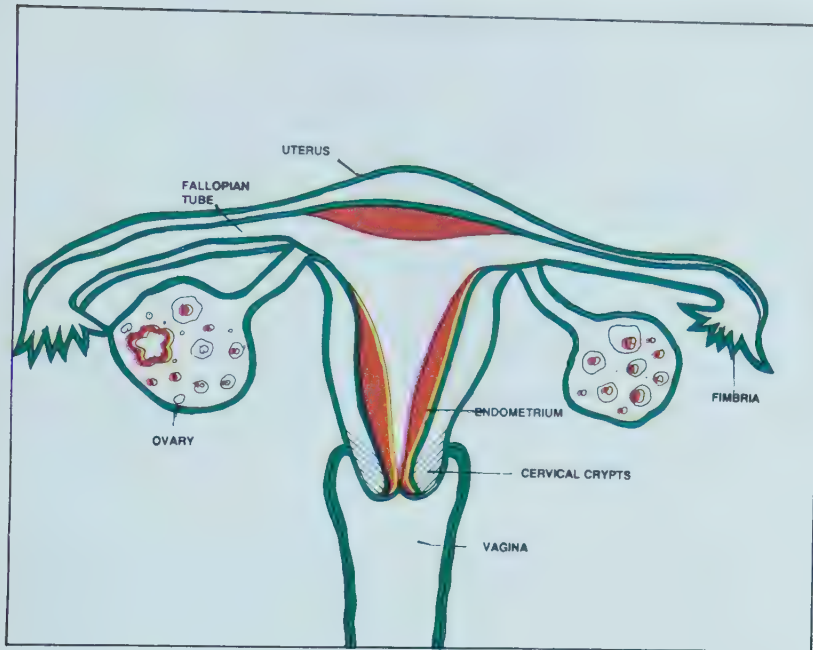
The sperm are produced in two glands called the testicles which are found in the scrotum. The sperms then are transported up a tube called the Vas deferens and then through the urethra they are expelled outside the body. The urethra passes through a muscular structure called the Penis and is also the passage for urinary excretion. The Seminal vesicle produces a lubricating substance that facilitates the passage of sperms.

MALE REPRODUCTIVE SYSTEM



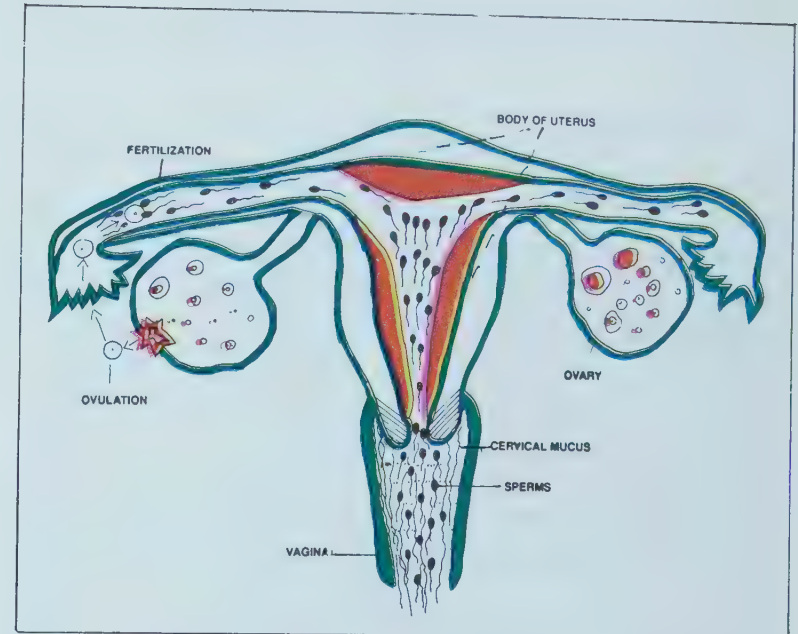
1.	Vas Deferens	6.	Rectum
2.	Urethra	7.	Prostrate
3.	Penis	8.	Testicle
4.	Ureter	9.	Scrotum
5.	Bladder		

FEMALE REPRODUCTIVE SYSTEM



The Uterus is a muscular structure and is lined by a mucus membrane called Endometrium. This lining builds from the beginning of each new menstrual cycle and represents a kind of “bed” in which the fertilised ovum (embryo) can come to rest, embed and grow. If the ovum is not fertilised, this “bed” at the end of the cycle will disintegrate and will be expelled along with the dead ovum and we call this as **Menstruation**.

FERTILIZATION



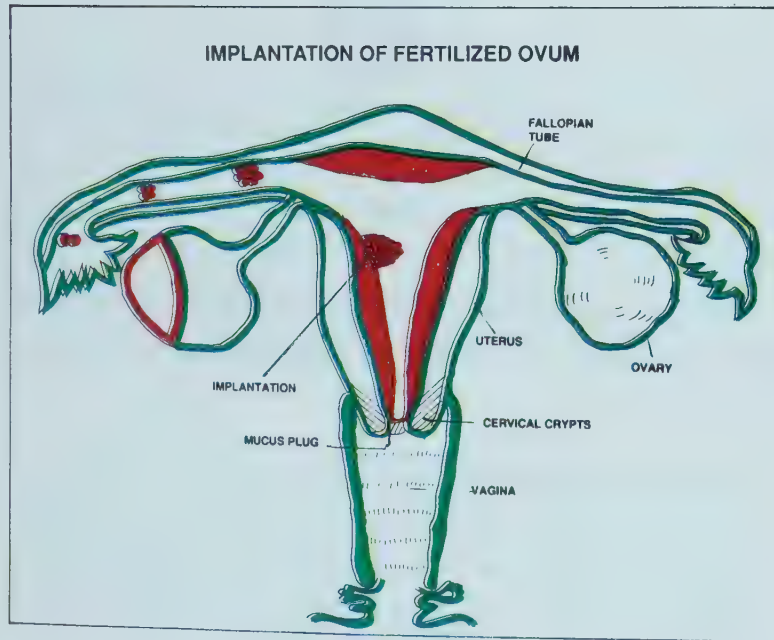
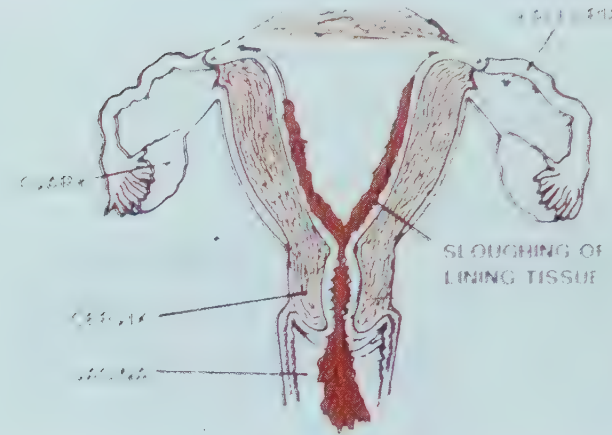
The Uterus and the ovaries communicate through the channels known as **Fallopian Tubes** inside which fertilization occurs.

The lower end of the womb is known as **cervix**. The mucosa lining the cervix has an intricate system of “crypts” which secrete **Mucus**. The crypts are very sensitive to the hormonal fluctuations and secrete different type of Mucus depending on the pre-ponderance of different circulating

MENSTRUATION

hormones. The secretion diminishes with menopause.

The **ovaries** are the organs producing the ovum or egg. This ovum if fertilised by the male seed (sperm) gives rise to a new life. The ovaries contain many follicles but only one undergoes a maturing process at the height of which it opens up to release the ovum. This process is called **Ovulation**. There is usually only one ovulation in any



menstrual cycle and the egg dies within 24 hours if not fertilised by the sperm. During the maturing process of the follicle, the ovaries send a signal to the neck of the womb which sets in motion the production of mucus.

From the presence of Mucus and the sensation of wetness or lubrication in the vagina, the woman can recognise that the Ovulation is imminent.

Ovulation is a complex physiologic process and depends on various messages received from centres in the Brain.

At the beginning of the menstrual cycle the ovaries are at a low level of activity, and only small amounts of female hormones estrogen and progesterone are circulating in the blood stream. As a result of this low level activity, the hypothalamus in the brain sends out a chemical message, known as a hormone, to the pituitary gland at the base of the brain. Pituitary hormones which act on the ovary are triggered. The ovarian follicles start to develop in the ovaries but usually only one follicle in the ovary reaches maturity in one cycle and produces the hormone estradiol as it matures. This hormone activates the cervical crypts to produce Mucus, the substance that signals the state of fertility. As the circulating estrogen increases, 1) the egg matures 2) the fertile characteristics of the mucus increases (mucus build up) that is, the mucus becomes clear, thin, slippery and stretchy, thus more fertile and 3) the endometrium builds up to receive the fertilised egg, the **embryo**.

DEVELOPMENT OF FETUS



In simple words, two things happen at the same time under the influence of the hormone estrogen. One is maturation of the ovum and the other production of Cervical Mucus. The woman cannot recognise Ovulation directly but every woman who ovulates produces mucus and she can recognise its presence from the wetness and sensation of lubrication in the vagina. On identifying the mucus she can identify Ovulation time, which is the possibly fertile time, the time of Conception.

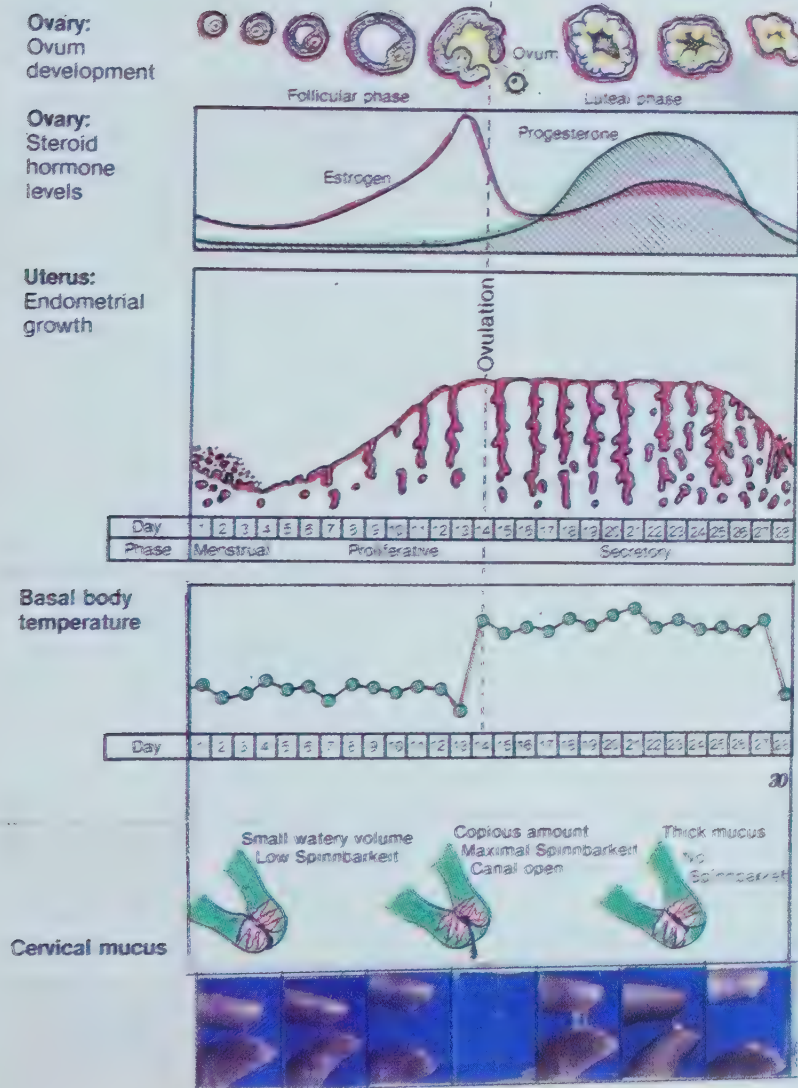
The Ovum remains in the fallopian Tube for about 24 hours and if the couple have marital act at this time the sperms get transported up with the help of the mucus and contraction of the uterus, into the tubes. Several become attached to the ovum but only one sperm penetrates it and this process is called **Fertilisation**. The fertilised egg is called **Embryo**. It divides into two, four, eight cells and so on to form a multicellular structure. As it divides it travels down to the uterus and becomes attached to the endometrium and this process is called **Implantation**. The foetus remains in the uterus and grows for 9 months (280 ± 7 days) until it is delivered.

“Lord, it was you who created my inmost self,
And put me together in my mother’s womb:
For all these Mysteries I thank you.
For the wonder of myself, for the wonder of your works”

CONTROL OF BRAIN OVER PRODUCTION OF SEX HORMONES



A SCHEMATIC CORRELATION



During pregnancy, there is no ovulation until after delivery. The time of return of ovulation and therefore of fertility after delivery varies from woman to woman.

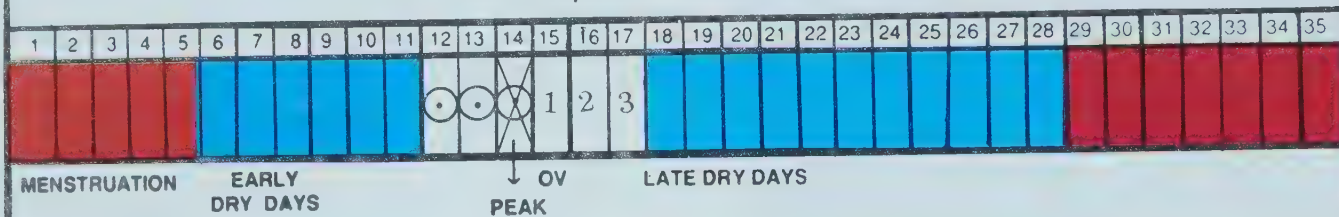
Precise detection of Ovulation is the basis for the success of the Ovulation Method. To detect the time of Ovulation, it is important for the woman to recognise the various bodily changes that occur during the Menstrual Cycle.

1. Menstruation: The duration of menstruation varies from woman to woman from about 3-7 days. The beginning of bleeding is taken as the first day of Menstrual Cycle.
2. Following menstruation the woman experiences a sensation of dryness in the vagina, may be for a day or two or even more, the number of days varying again from woman to woman, probably from cycle to cycle. This dryness is called the Basic Infertile

[The primary factor in effectively preventing pregnancy is that the couple must learn to identify the fertile days accurately and, when pregnancy is not desired, avoid marital act during those days. - WHO]

THE MENSTRUAL CYCLE

The mucus pattern of fertility and infertility



COLOUR CODE FOR CHARTS



Menstruation



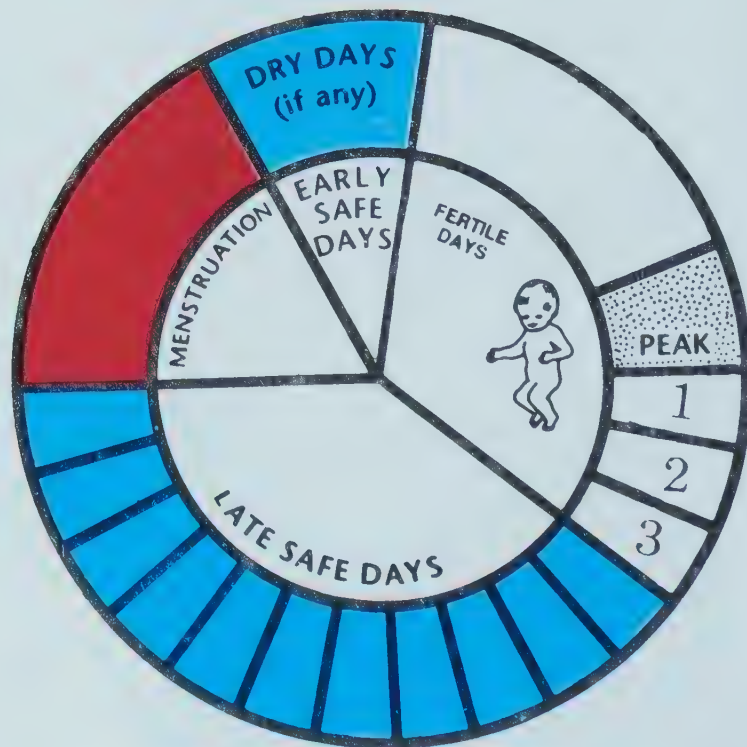
Infertile pattern of dryness



Possibly Fertile mucus



Peak: Maximal Fertility



Pattern (BIP). These days are called the Early Dry Days. In short cycles, dry days may be absent altogether.

3. One fine day at the end of the dry period as the woman goes about her work, she experiences wetness in the vagina due to a watery discharge or may be due to thick discharge. As the day progresses and over the following few days, as the circulating estrogen increases, the discharge turns into a clear transparent **slippery**, stretchy mucus, like the raw white of the egg and this is the fertile mucus. This mucus produces a sensation of lubrication in the vagina. These are the **Wet Days** and the number again varies from woman to woman. The last wet day, when the sensation of lubrication is maximum is called the 'PEAK'. However, the 'PEAK' day is recognised only on the following day when there is a marked change in the mucus, which becomes nonslippery, less stretchy, sticky and thick. This type of mucus lasts for about a couple of days or so after the Peak and the change is due to Progesterone, released by the Corpus Luteum.
4. Then dry sensation is felt in the vagina from the 4th day past the Peak till the following menstruation. These days are called the **Late Dry Days**.

So the changes are:

- 1) Menstruation
- 2) Early Dry Days
- 3) Wet Days
- 4) Late Dry Days

It is important for the woman to identify the PEAK day, which is the last wet day, when maximum sensation of lubrication is felt. The significance of the PEAK is that the Ovulation occurs within 24 hours. In a small percentage of cases it may occur on the second day after the PEAK. The ovum dies within 18-24 hours in most of the cases and in a small percentage lives upto 48 hours. The 3 days following the PEAK are Fertile as the egg may be alive in the Fallopian tube and available for fertilisation and also because the mucus may not be thick enough to prevent sperms to go up the reproductive track. It is to be understood that egg is not alive for 3 days, but for any 24 hours or less during the 3 days following the PEAK. The wet days when the mucus is clear and slippery before the PEAK are also fertile as sperm may remain alive in the presence of mucus for about 3 days or even more and fertilise the egg when it is released. So the fertile period is **ALL THE WET DAYS + 3 DAYS**. From the 4th day after the PEAK it is safe as the egg is dead and has disintegrated and thus conception is not possible.

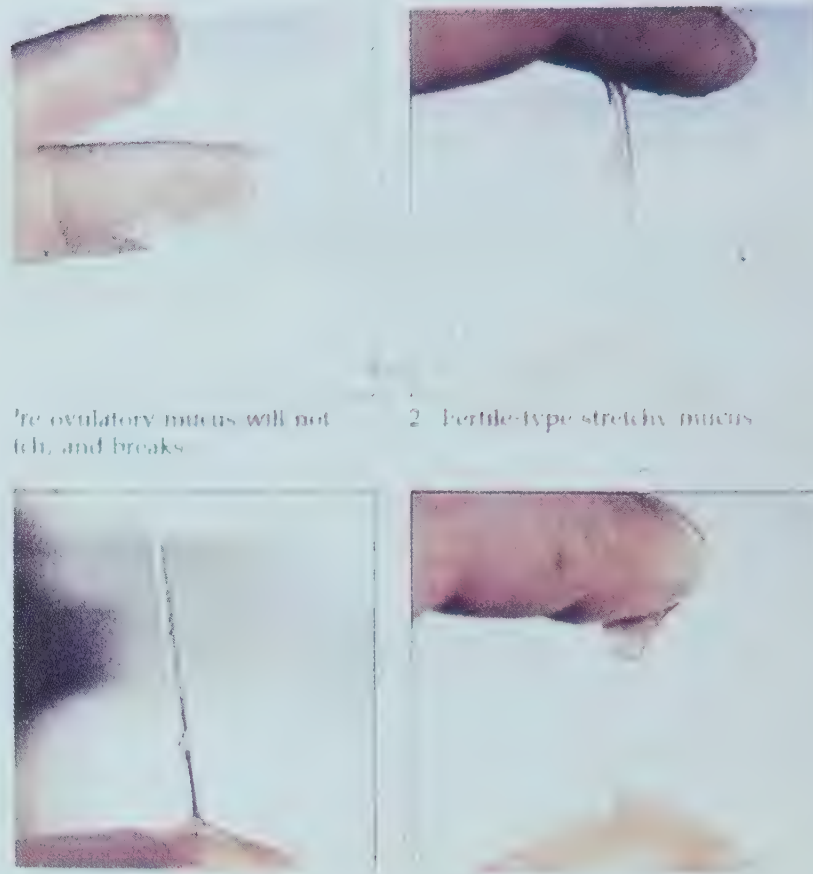
MUCUS

Cervical mucus is the single most important indicator of Fertility. The study of cervical mucus microstructure has been facilitated by the use of scanning electron microscopy and transmission electron microscopy.

Mucus is the substance produced by the cervical crypts. It is of two types Estrogen based thin type and Progesterone based thick type. Estrogen based mucus is clear, thin, slippery and stretchy like the raw white of the egg, and is produced during preovulatory days. It is composed of water, carbohydrates, proteins, fatty acids, minerals and enzymes and provides nourishment for the sperm. The macromolecular structure is arranged with wide inter spaces, and thus enables sperm movement freely into the uterus. This most sperm-receptive, sperm-friendly mucus stretches about 2" without breaking and this property is called 'Spinnbarkeit'. It also protects the sperms by enveloping them, and filters out damaged sperms. Inside dry vagina, the sperms die within minutes. **CERVICAL MUCUS IS ESSENTIAL FOR SPERM SURVIVAL AND FOR CONCEPTION TO OCCUR.**

Towards the Peak, the fertile mucus manifests a fern like appearance visible under microscope. The 'Ferning' is due to crystallization of Sodium Chloride content in it.

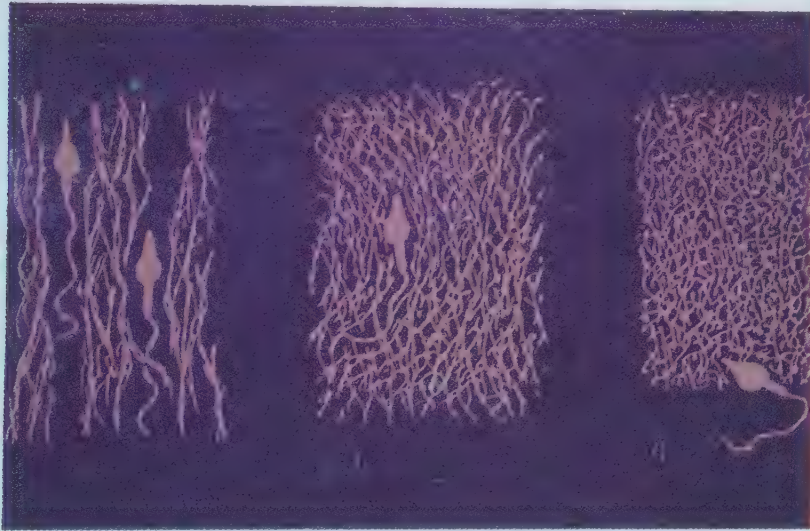
VARIOUS TYPE OF MUCUS



After the egg escapes the follicle, the remaining cells form a structure called the Corpus luteum which produces the hormone Progesterone. This hormone produces a marked change in the mucus, which becomes thick, turbid and sticky. Here the macromolecular structure is arranged in criss cross fashion making it difficult for the sperms to penetrate and be transported up.

Healthy sperm penetrate mucus better. Abnormal sperm with inferior motility have greater difficulty penetrating mucus.

MUCUS OF DIFFERENT CONSISTENCY



Sperm can survive in cervical mucus and maintain their fertility for upto 3 days or even more. Much of their survival appears to be dependent on the presence and characteristic of the mucus itself. It is found that the fertile period ends perhaps about 12 hours after Ovulation.

The occurrence of the cervical mucus secretion is a familiar observation to every woman who is capable of bearing children and indeed many women have grasped the significance without instruction.

Amongst people living in very primitive circumstances an understanding of the method can be conveyed, for example by comparing the times when the cervical mucus is present and when it is absent to the climatic “wet season” and “dry season” observed in many lands; it is during the wet season that the seed will germinate. The woman knows about the menstruation and can have her attention directed to the white discharge. **The Cervical Mucus is not only a marker within the cycle, it is, in a certain sense fertility itself.**

LEUCORRHEA: Some women complain that they have a white discharge throughout the month and wonder how they can recognize the fertile mucus. The white discharge may be due to poor hygiene, vaginal infection, cervicitis, debilitating conditions like anaemia etc. The discharge produced by these conditions is discoloured, has an unpleasant odour, thick, sticky, present throughout the month, until the condition causing it is treated. The fertile mucus instead is present around ovulation, is clear slippery and stretchy. Women when taught well, do not find it difficult to recognize the slippery mucus even when they have leucorrhea.

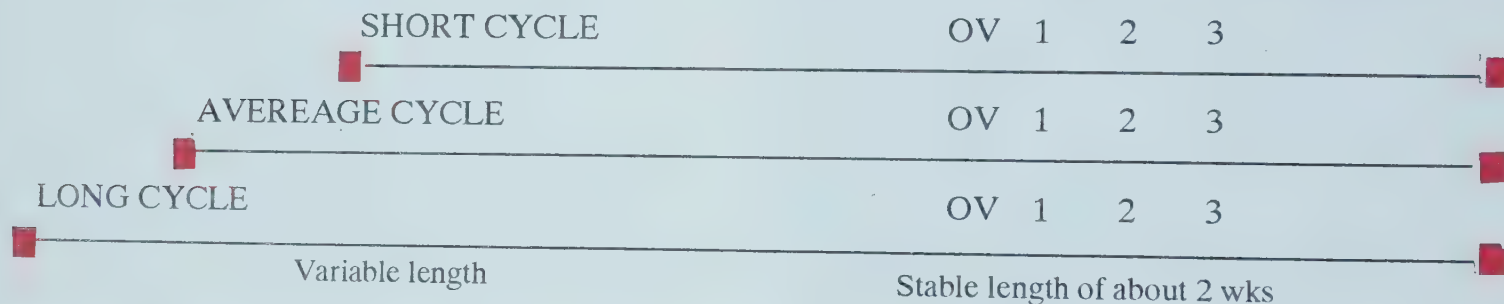
To follow the ovulation method successfully it is necessary:

1. for the teacher and the client to be motivated, to teach and to learn the method correctly;

2. to maintain the chart and mark the various bodily changes during the menstrual cycle, till recognising the changes becomes a way of life;
3. both husband and wife should learn the method, so that the husband may co-operate better.

PREOVULATORY

POSTOVULATORY



It is not necessary to use red and blue pencil to colour the chart. Some women living away from civilization are supposed to have used charcoal to make signs, one type for wet days and the other for the dry days. Similarly, any signs may be used, provided the user identifies the dry and wet days and can interpret her own method of recording.

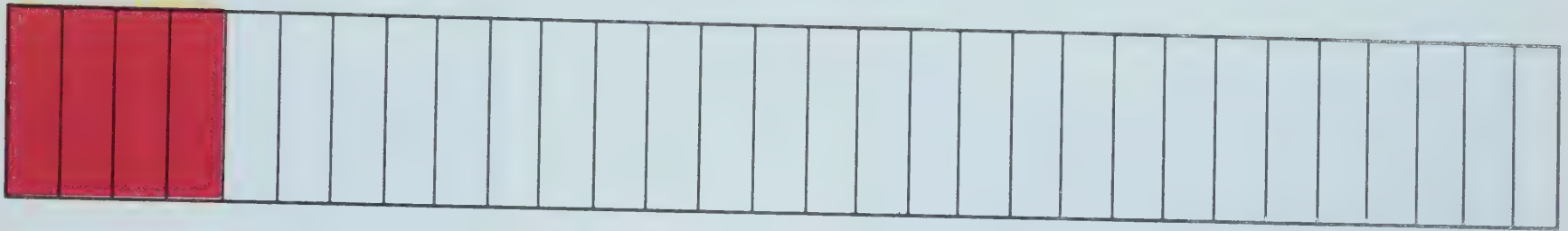
CHARTING

The most effective way of learning to recognize one's mucus signals is to record one's observations daily on a chart.

At the outset couples may feel, maintaining the chart is difficult. It is in fact easy and interesting. All that is needed is a paper and a red and blue pencil. Draw 2 lines and divide it into 30 parts, one for each day of a 30 day cycle. **Simply record your mucus observations without trying to interpret them at first.**

First we record the days of menstrual bleeding, may be 3 or 4 or more varying from woman to woman. For example, if a woman has bleeding for 4 days, the first four squares are marked in red.

Figure A



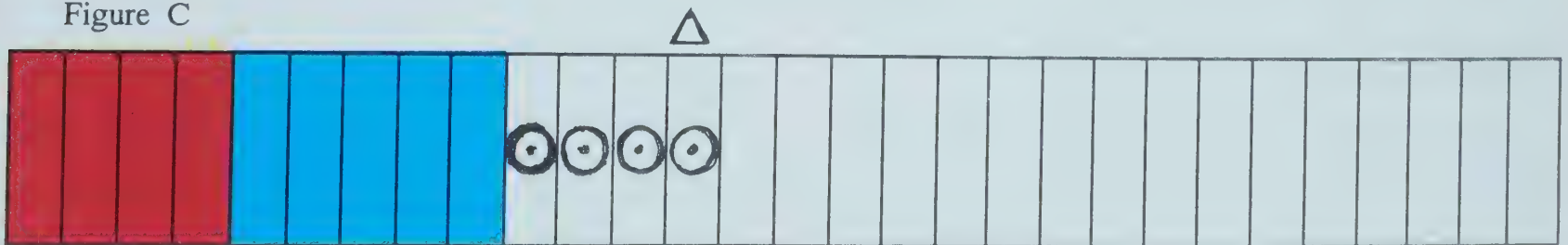
After menstruation, a dry time begins, say the woman has about 5 dry days. The next 5 squares are marked in blue.

Figure B



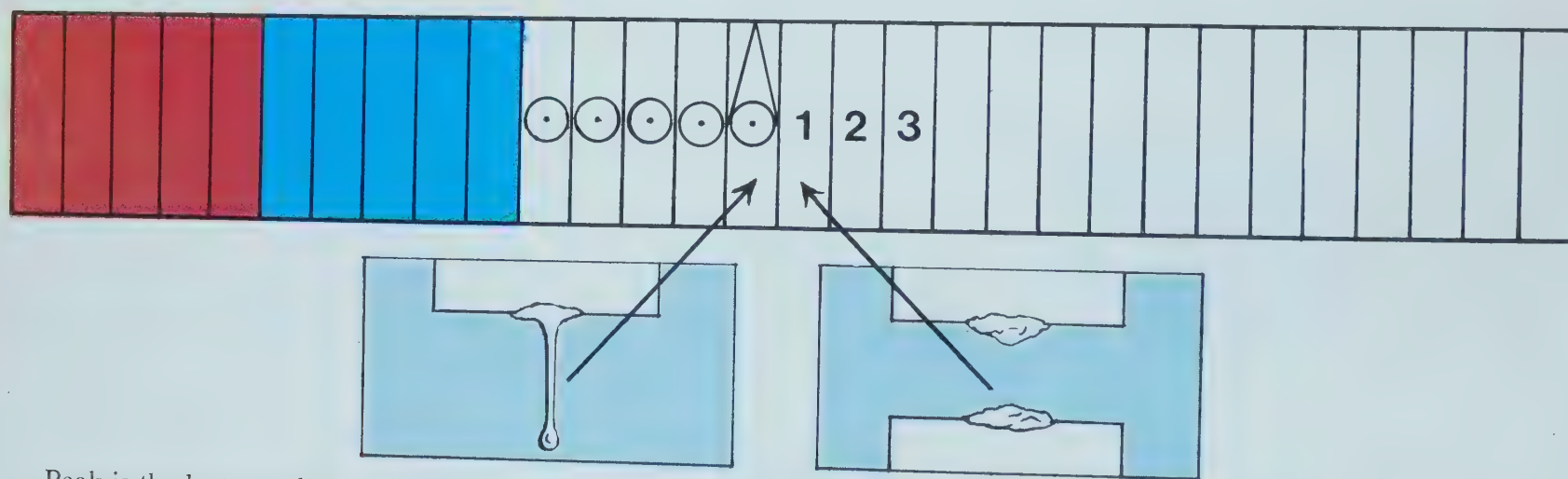
Now the dry days are followed by the wet days of mucus secretion say 3 or more, varying from woman to woman. These days are coloured thus. to show fertile days or baby days have started.

Figure C



The Last Wet Day which is the PEAK is marked thus ^ , to show it is an important day. The PEAK can be recognised only on the following day, when there is marked change in the mucus. The mucus becomes thick and non slippery. Ovulation occurs within 24 hours of the Peak. Let us mark the following day as the Ovulation day. Depending when it is released during the day, the egg dies on the same day or the next day. Suppose the egg is released on the 2nd day past the Peak as it happens in a few women then we leave the 3rd day past the Peak also for the possibility of the egg being alive. We mark the 3 days after the Peak as 1,2,3.

Figure D



Peak is the last wet day and is recognised only on the following day when there is marked change in the mucus.

Rules to postpone pregnancy

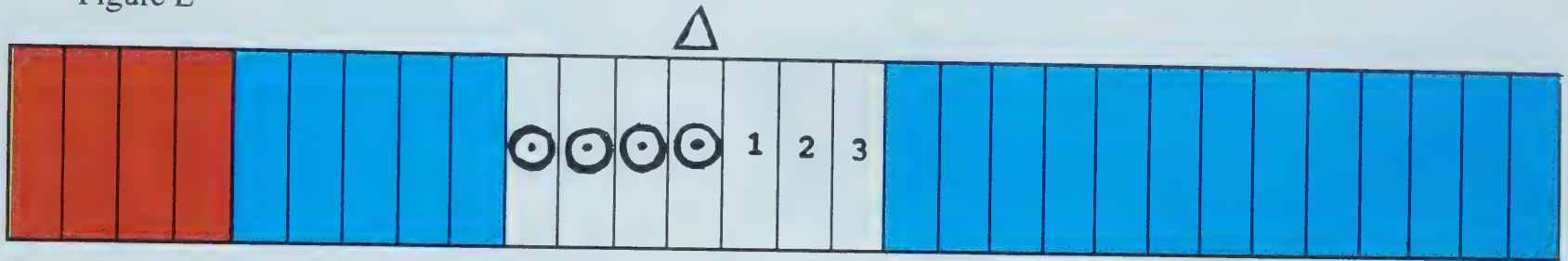
1. Avoid marital relations and intimate genital contact on the day of menstrual bleeding: because the brain may have started sending the messages to the ovaries early in the cycle; the mucus may then be marked by blood, making

it impossible for the woman to know that the time of fertility has started.

2. Early - Dry - Day - Rule: Confine marital relations to alternate evenings: marital relations on consecutive evenings is avoided because on the day after intercourse seminal fluid may mask the beginning of Mucus. In simple

We explained already how and why these 3 days are fertile. From the 4th day past the Peak till the following menstruation the Dry Days return and are marked blue.

Figure E



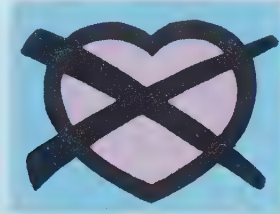
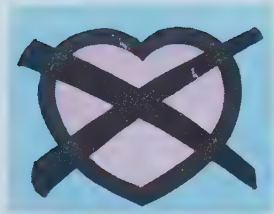
words, marital act to be had on alternate nights during Early Dry Days.

3. The early dry days in some women may last for many days or even weeks. During the time, which may last weeks or even months that the woman recognizes that she is infertile either because of the absence of any mucus, or because of the presence of a continuous vaginal discharge

which persists without change in any of its characteristics day after day, the couple must follow the rule of having marital relations only in the evening and not on consecutive evenings. This will enable the woman to recognize more easily the beginning of the fertile phase.

4. Avoid marital relations when there is any change from the Basic Infertile Pattern (dryness), plus three days of

RULES TO POSTPONE PREGNANCY



return to the pattern indicating infertility, if the mucus pattern has not built the **PEAK**. **Abstinence during any patch of mucus + 3 days is essential during Basic Infertile Pattern (during early dry days).**

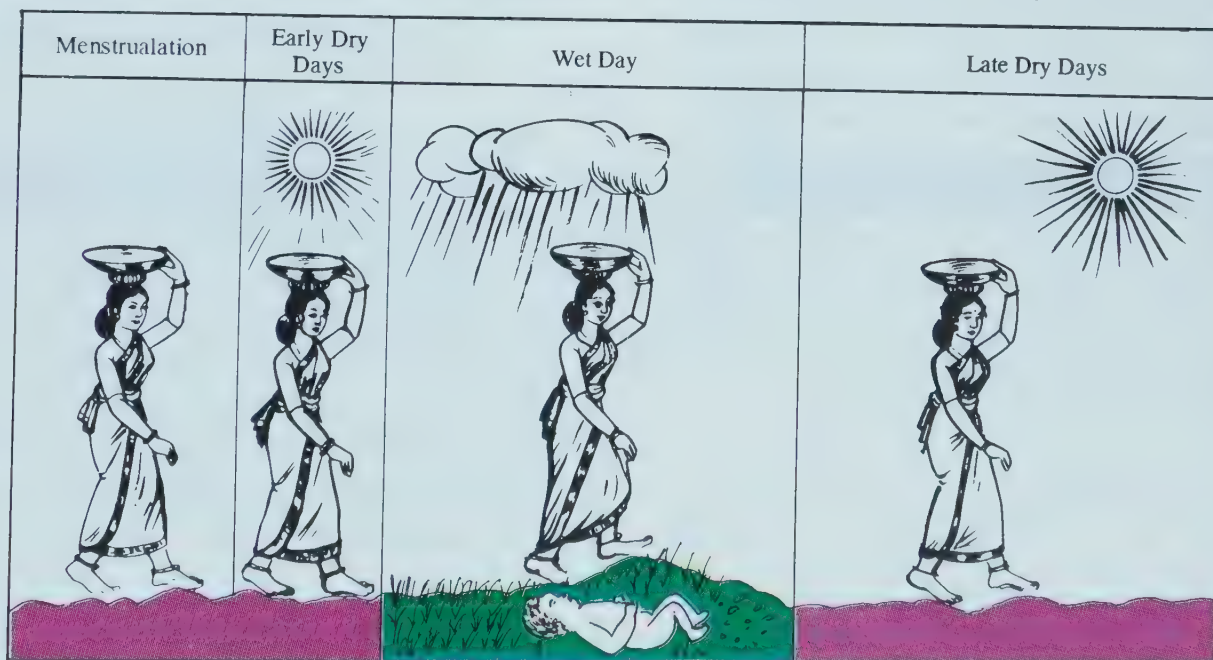
5. Avoid marital relations and intimate genital contact during the whole phase in which mucus is present plus three days after the **PEAK**. **ABSTINENCE ON ALL WET DAYS + 3 DAYS.**

6. Peak Rule : When the peak has been recognized, infertility is present from the fourth day past the peak until the next menstruation begins. Day or night intercourse will not result in pregnancy as the egg is dead and disintegrated and another egg will not be available until the following cycle. **NO EGG NO BABY.**

The illiterate and semi literate women also can follow the method successfully. As the rural folk live close to nature, they understand the bodily changes which are similar to the climatic seasons. It is not required to under-

stand the scientific basis of the method. All that they have to do is to observe the dry or wet sensation during the day and record it before going to bed and be taught the interpretation of these signs.

“When the ground is dry, a seed will not germinate, but when the rains come, prepare for a harvest. so it is with a woman, that when she is wet with the mucus and for three days afterwards she may expect the harvest of a baby”. (Teaching the Ovulation Method in the World Health Organisation study, El Salvador, Central America.)



Possibly
Infertile

Possibly Fertile

Infertile

Comparison of menstrual changes to climate seasons

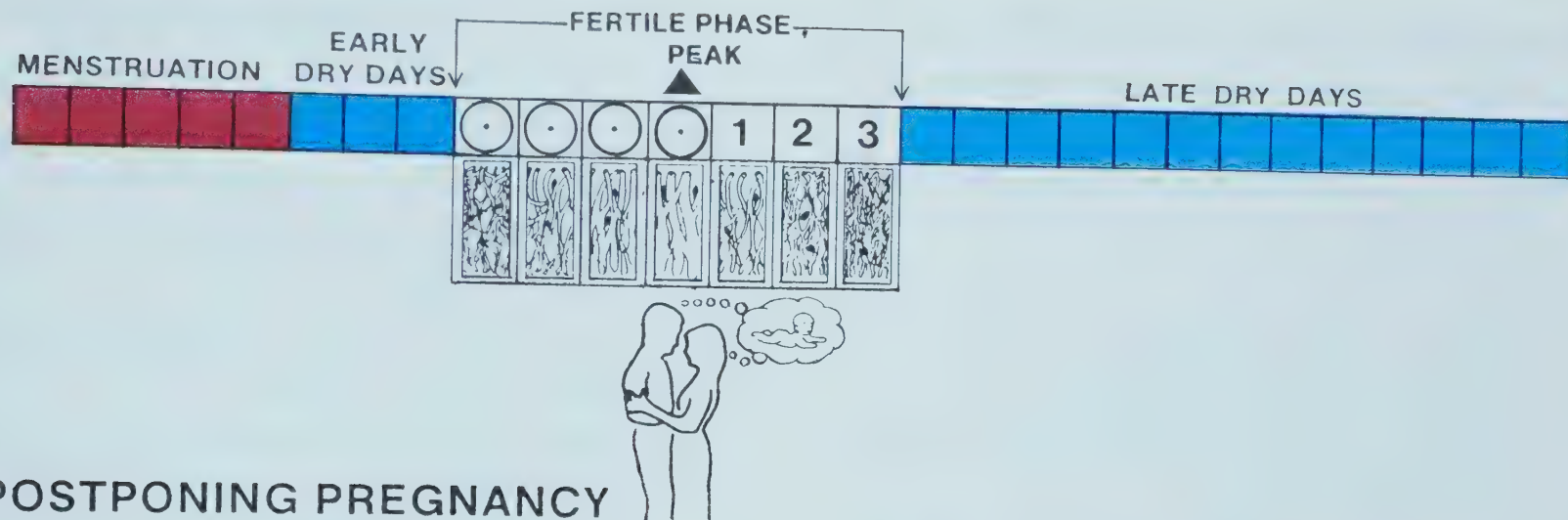
Achieving Pregnancy :

The Ovulation does not only help to postpone but also to achieve pregnancy. Though all the wet days and the following 3 days are fertile, the 3 days with the higher degree of fertility are the Peak, the day before Peak and the day after Peak, which is the Ovulation day. This is because of the thin flowing mucus present during these days with mucin arranged with wide interspaces forming channels that permit easy passage of sperms at the time ovum is available in the Fallopian tube. This awareness will be of help in certain cases of apparent infertility. For example, when a couple lives apart and meet once a month, due to the husband working in another place. This visit may be taking place month after month during the late dry days when the egg is dead and no more available for fertilisation. The wife has no opportunity to conceive. If the method is taught, so that the woman can recognise the fertile phase of her menstrual cycle and can make use of it, she can conceive, if no other reason for infertility exists.

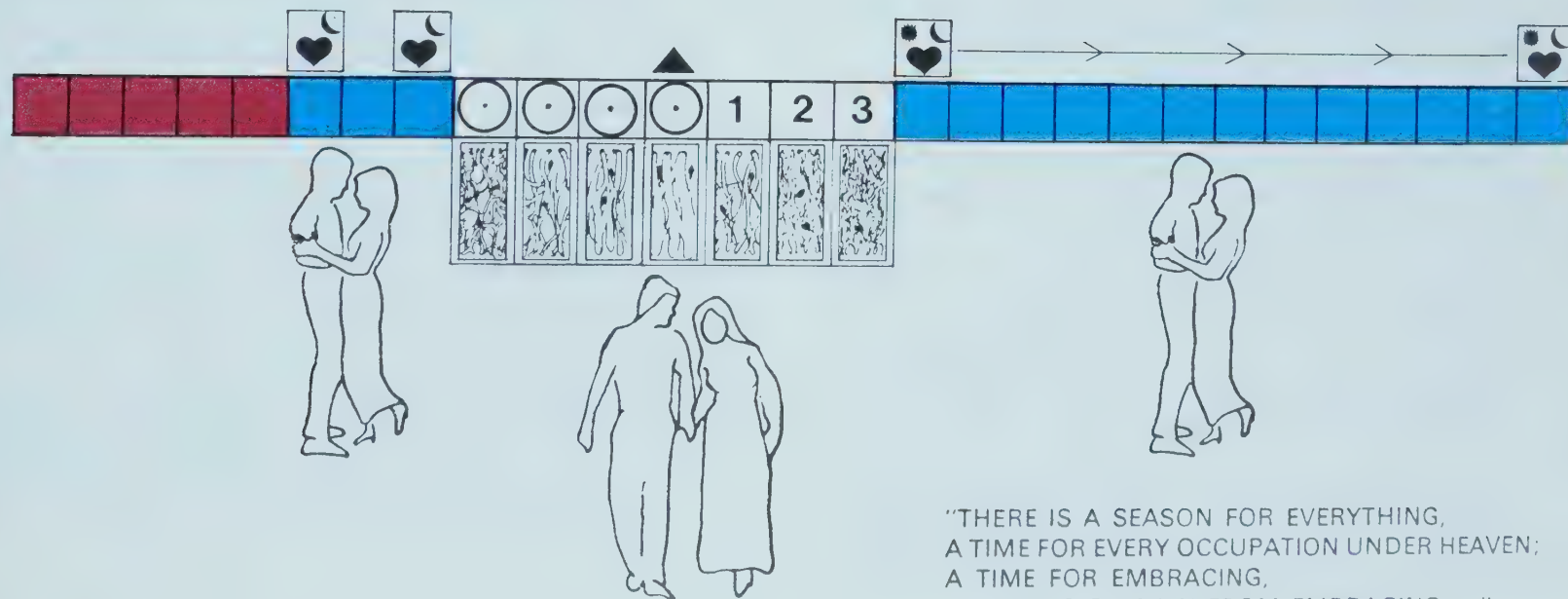
Another instance is the case of sub fertile men who produce less than optimum number of sperms. If abstinence is observed for a couple of days before the Peak the sperm concentration can be assisted and a better chance for conception will be available. In simple words, days of thin mucus should be preferred for the days of thick mucus, if pregnancy is desired.

There have been successful NFP services, that have demonstrated that NFP can be taught to illiterate people. In one programme in New Delhi, poor women in urban slums were taught fertility awareness. Most of the 2601 women in this study had rejected family planning methods in general and were attempting to space children by reducing the frequency of marital act. - WHO

ACHIEVING PREGNANCY



POSTPONING PREGNANCY



"THERE IS A SEASON FOR EVERYTHING,
A TIME FOR EVERY OCCUPATION UNDER HEAVEN;
A TIME FOR EMBRACING,
A TIME TO REFRAIN FROM EMBRACING"

The Advantages of the Ovulation Method :

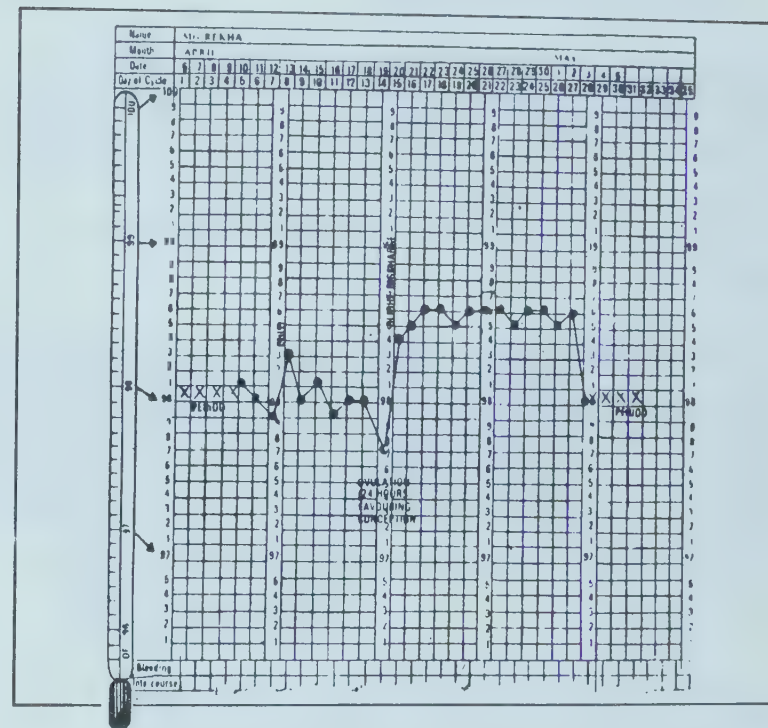
1. Ovulation Method is a natural method, which does not interfere with body's natural cycles.
2. It is useful as marker of gynaecological health and as a diagnostic sign in the early detection of gynaecological abnormalities.
3. Instruction of adolescent girls in regard to their fertility teaches them to value their fertility and to protect it, so that it proves to be an education in chastity.
4. There are no side effects as it does not involve the use of drugs or organ mutilation.
5. Since it is based on sound scientific principles, it is reliable.
6. There is no religious or moral objections to its use.
7. It elevates the status of women, giving them a better sense of their own dignity and the meaning of womanhood, thereby increasing their self respect.
8. This method can be used either to achieve or avoid pregnancy.
9. It is simple to follow and can be taught by non-medical people and is inexpensive.
10. There will be a good co-operation and co-ordination between the spouses, since both are involved in following this method. Thus it enhances the marital bond through constant communication.
11. The correct use of NFP method increases self awareness and knowledge of human reproductive functions.
12. Can be used successfully at any stage of a woman's reproductive life - regular cycles; irregular cycles; breast feeding; premenopause; low fertility; coming off the Pill.
13. If understood well and followed carefully the success rate of Ovulation Method is over 98.5%
14. It does not disturb privacy. No one besides the couple would know what method they follow.
15. The therapy that it exercises upon the conjugal relationship is beneficial; the use of the method by a married couple stabilises the family, in peace, happiness and fidelity with outstanding benefits not only to the husband and wife but also to the children. This social influence of the method is of major importance in the modern world, where family disintegration has reached catastrophic proportion, beyond anything which has ever been experienced in world history previously.
16. The woman has control on her own fertility. No one need to dictate to her how to use it. This is not only a human rights issue but a woman's rights one.
17. Analysis of the ICMR Task Force Studies in NFP show that the NFP is compatible with Indian culture and also a secular option to many Indian couples (ICMR study on 55,469 married women.)

Other natural methods :

Temperature Method : By recording the Basal Body Temperature by a woman at the same time every morning after a few hours of complete rest and before getting out of bed and with a BB Thermometer, she will recognise a dip in the temperature of $1/2$ degree or so followed by a rise of $1/2$ degree or so a few days after menstruation. If this Thermal Shift persists for 4 days or more, it is indicative of ovulation. Here the ovulation detection can be accurate but it is done in retrospect. Whereas in Cervical Mucus method, the approach of ovulation is recognised as soon as the mucus starts being produced, so that the woman can take proper precaution to postpone pregnancy.

Symptothermic Method : This combines the Thermal Shift, Mucus Symptom and a few other secondary symptoms such as, pain spotting of blood and mood changes. An enlarged pea sized lymph node can be felt in the groin on the same side as the ovary containing the maturing follicle in some women. Sometimes this gland may enlarge and become tender again in the luteal phase (Odeblad). These secondary symptoms are not constant. Breast feeding is also natural method of child spacing. **“Mucus is the most reliable symptom”**.

BASAL TEMPERATURE CHART



Do not be concerned that your pattern does not conform to that of other women. Periods of fertile type mucus may be longer or shorter, in quantity, in duration and, the mucus may be more or less. Each woman will find that she has her own recognizable pattern which is as individual as she is.

Special Circumstances:

Though the Ovulation Method is useful throughout the child bearing period, there are some special circumstances in a woman's life when it helps in a particular way, such as during Post Partum Breast Feeding, while she is still amenorrhic; during pre-menopause and when coming off the pill.

Coming off the Pill : After stopping contraceptive medication, a long time may elapse before fertility returns. There may be a prolonged period of Basic Infertile Pattern of wetness or Basic Infertile Pattern of unchanging mucus. The woman is taught to identify this period so that when the mucus patch appears later, she can identify the return to fertility.

Pre-Menopause : As a woman nears menopause she is often unduly anxious about avoiding pregnancy. She should therefore be assured that the fertility awareness can be achieved by charting her daily observations of the mucus pattern and applying the rules for the avoidance of pregnancy. If she experiences dry days for a prolonged period, does not observe mucus and misses a period, it may not be due to pregnancy but due to onset of menopause.

During the irregular periods or prolonged dry days following menstruation if any patch of mucus is noticed,

abstinence during the wet days + 3 days is advised.

After delivery, while women do not menstruate for variable period of time, it is possible for them to conceive, to the surprise of most women. They believe that unless they menstruate they will not be able to conceive. They are unaware of the fact that fertility can return before menstruation and that conception does not depend on menstruation but on Ovulation.

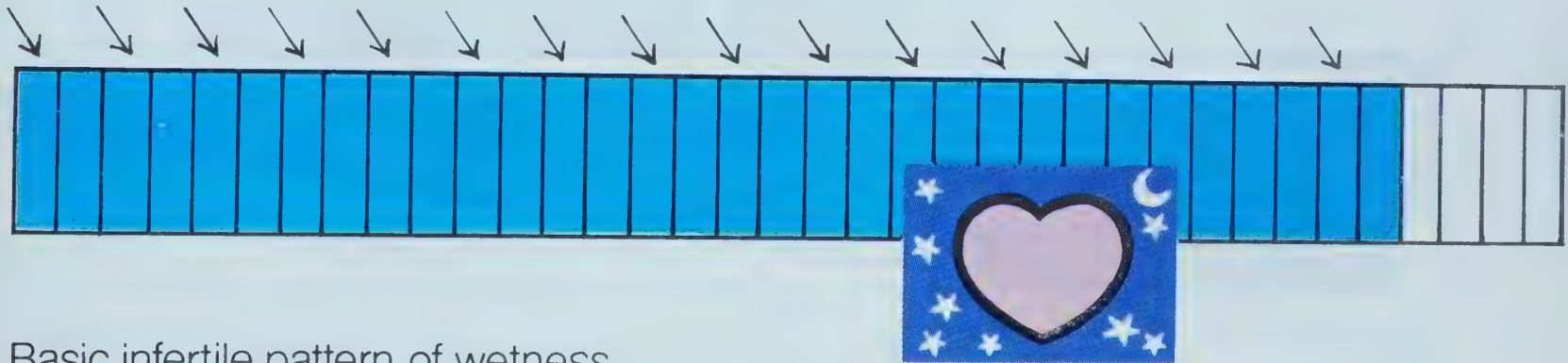
This natural method of child spacing is all the more important for them as other artificial methods are not advisable soon after delivery.

Breast Feeding : During breast feeding, most women experience a period of natural infertility. This period varies and depends on length and frequency of suckling time. At first the woman experiences dryness day after day over weeks and months. This is Basic Infertile Pattern of dryness or she may have thick unchanging mucus day after day - Basic Infertile Pattern of wetness. These changes reflect the low estrogen levels, indicating the woman's state of infertility. Later on ovarian follicle matures, producing estrogen which stimulates the cervical mucus and thus the wetness in the vagina indicates return of fertility. The woman may, after weeks of dryness feel a wet sensation. The couple should abstain on that day plus 3 days. As the estrogen builds up, the sensation of wetness

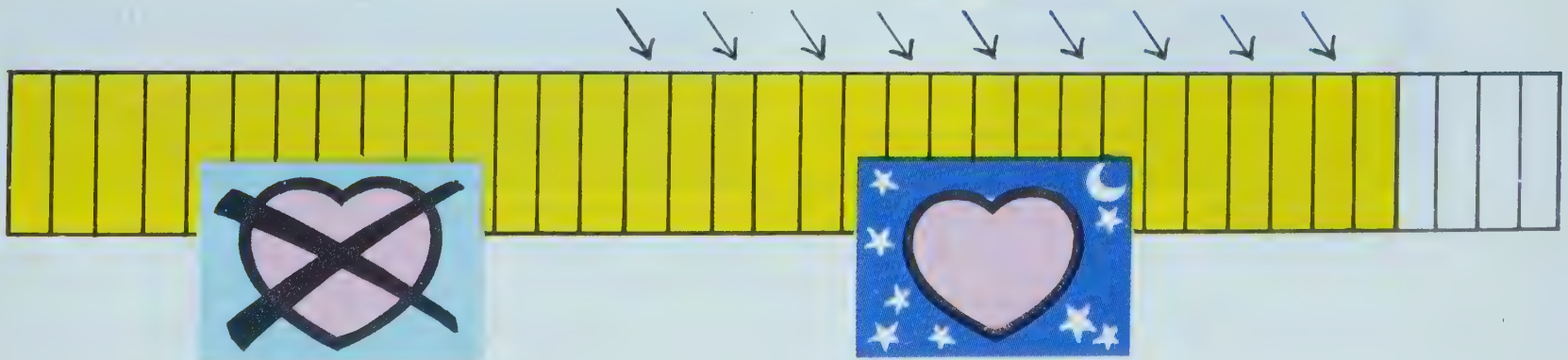
BREAST FEEDING

DELAY MARITAL RELATIONS UNTIL THE EVENING OF EVERY OTHER DAY OF DRYNESS OR OF UN-CHANGING DISCHARGE.

Basic infertile pattern of dryness



Basic infertile pattern of wetness



AVOID MARITAL RELATIONS ALTOGETHER WHEN THERE IS A CHANGE FROM DRYNESS OR FROM THE UNCHANGING DISCHARGE UNTIL THE FOURTH EVENING AFTER THE SAME PATTERN OF INFERTILITY RETURNS.



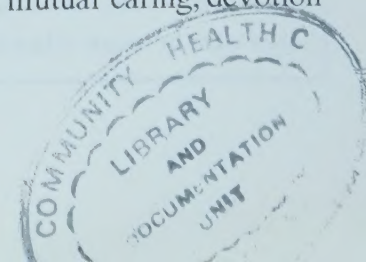
and lubrication increases and abstinence is required for the duration of wetness plus 3 days. Once she recognises Ovulation, She should follow the Rules to postpone pregnancy.

Conclusion of the study : The Department of Family Welfare and Fertility Study made a study on a group of 100 women from 3rd-9th month post partum period. They were taught the Ovulation Method, to maintain the charts and to interpret them. Some women went off the study due to transfers, return of menses and for other reasons. Only 56 women persevered. Everyone of them, at the end of the study could identify the wet days, which appeared as patches of increasing length during the BIP of dryness or wetness. By abstaining during any patch of mucus + 3 days, they learnt to postpone pregnancy successfully. The Billings Ovulation Method is truly compatible with breast feeding. It does not interfere with breast feeding in the slightest and alerts a couple to their returning to fertility after delivery. In the weeks or months postpartum when a basic infertile pattern is continuous and the mother is in an infertile phase, there is a good opportunity for a couple to learn and become familiar with charting so that it becomes part of their daily routine. Once changes start to occur, i.e. mucus, bleeding or spotting these are identified easily and acted upon according to the couples' desire, that is either to achieve or avoid pregnancy.

Abstinence:

To practise NFP, the couple need self-control. A large number of couples the world over practise this method, some with ease and some with sacrifice.

Actually, it is the eastern religions such as Buddhism and Hinduism that passed on a wealth of spiritual and philosophical truths in the matter of love, sex, health and procreation, to the rest of the world. In Hindu literature and yogic practice, we are introduced to the concept of "Life force" that every man is endowed with. There is a conscious effort to develop, and to care for, "Kundalini", the power of creation, and in order to save this energy, the couple practise abstinence and continence, periodically. In higher branches of Yoga, such as Raja Yoga, temporary and even long - term, abstinence is believed to contribute greatly to one's spiritual development. The energy that would have been spent in the marital act is offered lovingly to Brahma and one's partner, for the opening, clearing and the empowering of the energy centres of the 'Chakras'. This results in a calmer personality, deeper vision, and inner power, and makes one a more loving and compassionate person, with inner strength and control over the basic emotions such as anger, passion etc. It elevates the conjugal love to a higher plane of mutual caring, devotion and understanding.



In the Buddhist and Taoist belief systems, abstinence is believed to strengthen the life force, and the couple finds help to observe this through fasting, prayer, meditation, simple diet and exercise.

WHO definition of periodic abstinence is voluntary avoidance of marital act by a couple during the fertile phase of the menstrual cycle, in order to avoid pregnancy.

“Self-discipline brings to family life, abundant fruits of tranquility and peace. It fosters in husband and wife, thoughtfulness, trust and loving consideration for each other (Humanae Vitae).”

To live with our bodies, and not in spite of them, is a discovery our “Civilized” world is just now making. An old Asian Wisdom maintains that perfection is only acquired through the mastery of the body. The more one is able to live with his or her own body and master its nature, the freer is one’s mind and the wider the horizons. An African chief, when describing the period of abstinence required for couples in his tribe after the birth of a child seems to have said, “A real man is one who can wait. Only a child takes what he wants when he wants it”.



International Conference on fertility awareness 1990- the year of the girl child.



A special mention to be made about the author of this book Dr. (Sr.) Agostina Thomas, Head of the Dept. of Family Welfare & Fertility Study who has done extensive work in this area has dedicated her service in building up this Department to its present status and in promoting our Department's aims and objects in Teaching, Service and Research. Dr. (Sr.) Agostina is also the organiser of many Local, National and International Training Conferences which have enabled the Fertility Awareness to reach far and wide.

Our gratitude to Dr. Agostina and to all who have helped in establishing the department and achieving its objectives.

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